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- (71) Applicant (for all designated States except US): UNIVER-SITY OF UTAH RESEARCH FOUNDATION [US/US]; 615 Arapeen Drive, Suite 310, Salt Lake City, UT 84108 (US).
- (72) Inventors; and
- Inventors/Applicants (for US only): GESTELAND, Raymond, F. [US/US]; 6877 East Killyon Canyon, Salt Lake City, UT 54108 (US). ATKINS, John, F. [IE/US]; 3134 Emmgration Canyon, Salt Lake City, UT 84108 (US). MATEEVA, Olga, V. [RU/US]; 250 N, 200W, Apt. 203, Salt Lake City, UT 84103 (US). SHABALINA, Svetlana, A. [RU/US]; 6404 Landon Lane, Bethesda, MD 20817 (US).

- (74) Agents: HUIZENGA, David, E. et al.; Needle & Rosenberg, P.C., Suite 1000, 999 Peachtree Street, Atlanta, GA 30309-3915 (US).
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(54) Title: METHODS, ARTICLES, AND COMPOSITIONS FOR IDENTIFYING OLIGONUCLEOTIDES

(57) Abstract: There are many situations where oligonucleotides that efficiently bind a target DNA or RNA are desired. These oligonucleotides can be used for a variety of purposes, including antisense, diagnostics, and array generation. While researchers have worked for many years to identify algorithms and methods for predicting the oligonucleotides that will bind the target with the highest efficiency, better prediction methods are needed. Disclosed are methods, articles, machines, and compositions that aid in identifying oligonucleotides and sets of oligonucleotides that will efficiently bind a target nucleic acid molecule. Also disclosed are optimized sets of oligonucleotides that bind HIV-1 genomic RNA or DNA,, such as the GAG RNA, and methods of using them.

